

April 27, 1994

15,816.001

Mr. Joe Miles
Toppenish Department of Public Works
21 West First Avenue
Toppenish, Washington 98948

Dear Mr. Miles:

Summary of Field Activities
Petroleum Hydrocarbon Compounds Site Assessment
21 West First Avenue
Toppenish, Washington

GENERAL

This letter report summarizes activities performed by AGI Technologies (formerly Applied Geotechnology Inc.) on April 12 and 13, 1994 at the above referenced site. AGI was authorized by the City of Toppenish to provide these services after Pacific Environmental Services Company (PESCO) encountered soil and groundwater contamination during underground storage tank (UST) removal.

PURPOSE AND SCOPE OF SERVICES

The purpose of our services was to evaluate the immediate risk to human health and the environment due to petroleum hydrocarbon compounds in soil and groundwater following a release from a UST system at the site. Our scope of services consisted of the following:

- Observing the excavation of four test pits to determine the extent of contamination.
- Field screening soil during test pit excavation using an organic vapor meter equipped with a photoionization detector (OVM-PID).
- Collecting four soil samples and four water samples and analyzing them for total petroleum hydrocarbons (TPH) quantified as diesel by Washington State Method WTPH-D.

USEPA REG



0001121

TEST PIT EXCAVATION

Four test pits were excavated surrounding the area of concern. Each test pit was excavated to a depth of approximately 13 feet below ground surface (bgs). Groundwater was encountered at approximately 12 feet bgs. The excavated soil was field screened using an OVM-PID. Field screening did not indicate the presence of hydrocarbons.

ANALYTICAL RESULTS

A soil and water sample was collected from each of the four test pits and analyzed for TPH quantified as diesel. All soil and water samples results were below detection limits for diesel fuel. A copy of the lab report is attached.

Results for one test pit indicated a low level of hydrocarbons in the waste oil range. This was verbally reported by the lab to be approximately 200 parts per million.

Results of test pit sampling indicate that the extent of contamination identified by PESCO during tank removal is limited and can be addressed through overexcavation and limited groundwater pumping and disposal. Submitted to you in a separate letter is AGI's proposed remedial activities for the site.

RECOMMENDATIONS

Based on the results of the test pit investigation, we recommend that the residual soil contamination identified by PESCO during the tank removal be excavated and that several volumes of water be removed using a sump that has already been installed. Soil samples should be taken to confirm all soil contamination has been removed and groundwater samples should be taken to monitor residual levels of diesel that may remain.

LIMITATIONS

This report has been prepared for exclusive use by Toppenish Department of Public Works and its other consultants for this project only. The analysis, conclusions, and recommendations in this report are based on conditions encountered at the time of our field investigation, design information you provided, and our experience and engineering judgement. AGI cannot be responsible for the interpretation by others of the data contained herein.

Mr. Joe Miles
Toppenish Department of Public Works
April 27, 1994
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Our work has been performed in a manner consistent with that level of care ordinarily exercised by members of the profession currently practicing under similar conditions in the area. No other warranty, express or implied, is made.

Sincerely,

AGI Technologies

A handwritten signature in dark ink, appearing to read "Ross R. Stainsby".

Ross R. Stainsby
Geologist

A handwritten signature in dark ink, appearing to read "Gary Laakso".

Gary Laakso
Remediation Services Manager

RRS/GLL/kjw

attachments

APR 21 1994

APPLIED GEOTECHNOLOGY INC.



April 18, 1994
Lab Traveler #:04-046

Ross Stainsby
Applied Geotechnology, Inc.
300 120th Avenue NE
Bellevue, WA 98009

Dear Ross:

Enclosed are the results of the analyses of samples submitted on April 13, 1994 from Project 15816.001.

We appreciate this opportunity to be of service to you on this project. If you have any questions regarding this report, please feel free to call me.

Sincerely,

A handwritten signature in cursive script that reads "Andy Bay".

Andy Bay
Project Chemist

Enclosures

Date of Report: April 18, 1994
Samples Submitted: April 13, 1994
Lab Traveler: 04-046
Project: 15816.001

WTPH-D

Date Extracted: 4-14-94
Date Analyzed: 4-14-94

Matrix: Soil
Units: mg/Kg (ppm)

Client ID	Dilution Factor	TPH	o-terphenyl Surrogate Recovery
TP1-S	1	<25	90%
TP2-S	1	<25	87%
TP3-S	1	<25	82%
TP4-S	1	<25 ^D	83%

D-Hydrocarbons in the heavy oil region(>C₂₄) present in the sample.

Date of Report: April 18, 1994
 Samples Submitted: April 13, 1994
 Lab Traveler: 04-046
 Project: 15816.001

WTPH-D QUALITY ASSURANCE

Date Extracted: 4-14-94
 Date Analyzed: 4-14-94

Matrix: Soil
 Units: mg/Kg (ppm)

	Dilution Factor	TPH	o-terphenyl Surrogate Recovery
Method Blank	1	<25	104%
Sample: 04-041-15	1	198	78%
Duplicate	1	240	84%
RPD		19%	

	Dilution Factor	TPH	o-terphenyl Surrogate Recovery
Spiked @ 100 ppm			
Spike Blank	1	105	108%
Percent Recovery		105%	
Spike Blank Duplicate	1	103	111%
Percent Recovery		103%	
RPD		1.9%	

Date of Report: April 18, 1994
Samples Submitted: April 13, 1994
Lab Traveler: 04-046
Project: 15816.001

WTPH-D

Date Extracted: 4-14-94
Date Analyzed: 4-14-94

Matrix: Water
Units: mg/L (ppm)

Client ID	Dilution Factor	TPH	o-terphenyl Surrogate Recovery
TP1-W	.02	<.50	95%
TP2-W	.02	<.50	109%
TP3-W	.02	<.50	109%
TP4-W	.02	<.50	106%

Date of Report: April 18, 1994
Samples Submitted: April 13, 1994
Lab Traveler: 04-046
Project: 15816.001

**WTPH-D
QUALITY ASSURANCE**

Date Extracted: 4-14-94
Date Analyzed: 4-14-94

Matrix: Water
Units: mg/L (ppm)

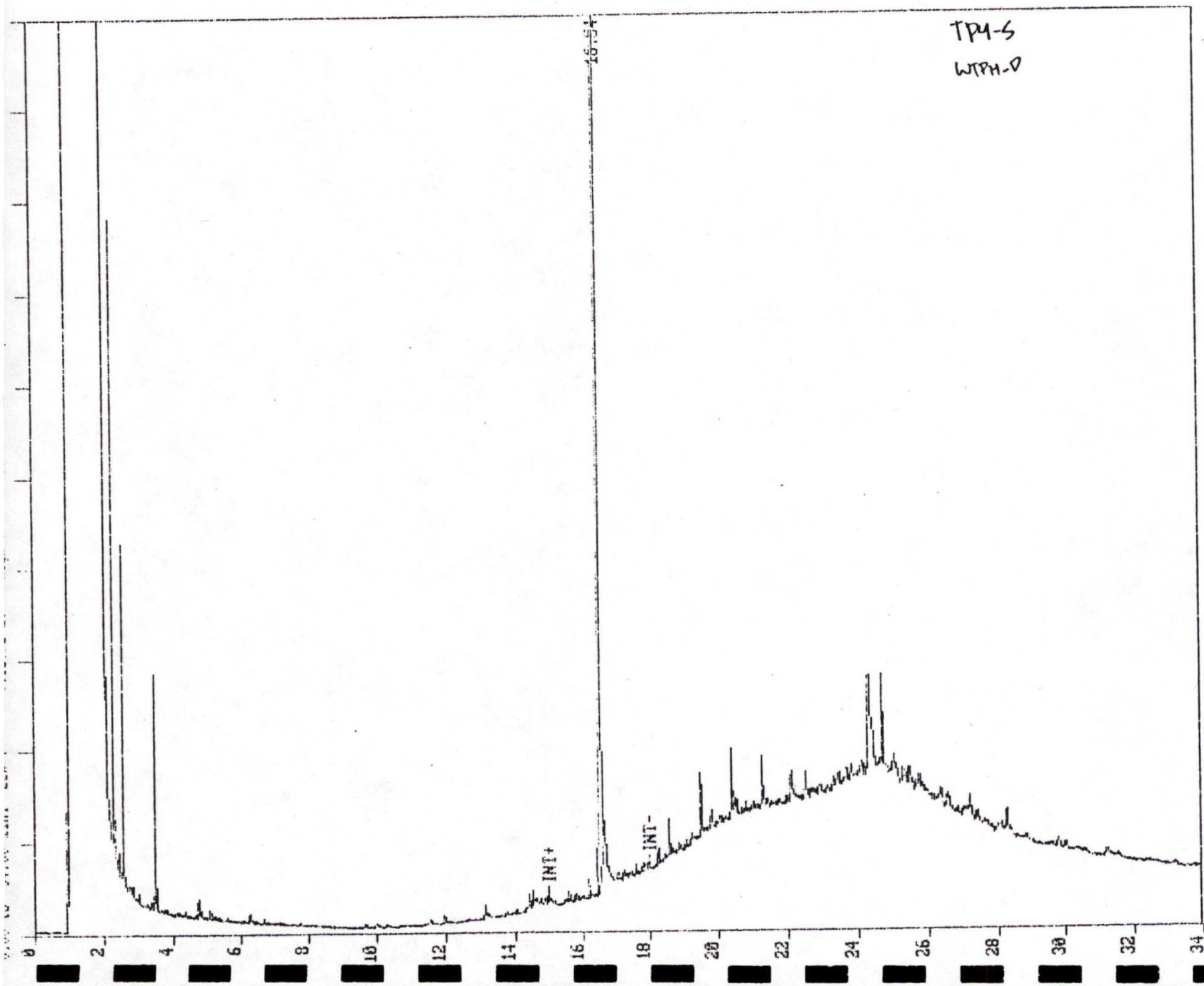
	Dilution Factor	TPH	o-terphenyl Surrogate Recovery
Method Blank	.02	<.50	98%
Sample: 04-040-2	.02	.818	90%
Duplicate	.02	.617	102%
RPD		28%	

Date of Report: April 18, 1994
Samples Submitted: April 13, 1994
Lab Traveler: 04-046
Project: 15816.001

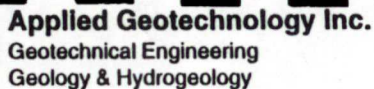
Date Analyzed: 4-14-94

RESULTS OF DRY WEIGHT

Client ID	% Moisture
TP1-S	9%
TP2-S	8%
TP3-S	9%
TP4-S	10%



TPM-S
WTPH-0



Date 4-13-84 Page 1 of

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